

Application Serial No. 10/647,895

Attorney Docket: 4605-0001

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-14. (Cancelled)

15. (Previously presented) A water craft adapted to be propelled comprising a water pumping arrangement including a sheath carried by the water craft, the sheath including a propeller adapted to be turned, the sheath, water craft and propeller being arranged for causing the propeller while turning and while the water craft is moving forward in a body of water to (a) suck water from the body of water into the sheath interior via at least one opening in the sheath, (b) force the sucked water upwardly and (c) force the upwardly forced water through another opening in the sheath below the surface of the body of the water for causing the water forced through the another opening to (i) have speed greater than the speed of the water sucked into the sheath and (ii) cause air bubbles to be induced in the water above the another opening.

16. (Previously presented) The water craft of claim 15 wherein the sheath and propeller are arranged so the propeller is adapted to turn about an axis tilted at an angle in the range of 60° to 90° relative to the surface of the body of water while the water craft is moving forward in the body of water.

17. (Previously presented) The water craft of claim 15 wherein the water pumping arrangement includes a plurality of the sheaths each including a propeller adapted to be turned, the sheaths, water craft and propellers being arranged for causing the propellers while turning and while the water craft is moving forward in the body of water to (a) suck water from the body into the sheath interior via at least one opening in the sheath, (b) force the sucked water upwardly and (c)

Application Serial No. 10/647,895

Attorney Docket: 4605-0001

force the upwardly forced water through another opening in the sheath below the surface of the body of the water for causing the water forced through the another opening to (i) have speed greater than the speed of the water sucked into the sheath and (ii) cause air bubbled to be induced in the water above the another opening.

18. (Previously presented) A water craft adapted to be propelled comprising a water pumping arrangement including a sheath carried by the craft, the sheath including a propeller adapted to be turned; the sheath, water craft and propeller being arranged for causing the propeller while turning to (a) suck water from the body into the sheath interior via at least one opening in the sheath, (b) force the sucked water upwardly and (c) force the upwardly forced water through another opening in the sheath below the surface of the body of the water for causing the water forced through the another opening to (i) have speed greater than the speed of the water sucked into the sheath and (ii) cause air bubbles to be induced in the water above the another opening, the water pumping arrangement including a plurality of the sheaths each including a propeller adapted to be turned; the sheaths, water craft and propellers being arranged for causing the propellers while turning to (a) suck water from the body into the sheath interior via at least one opening in the sheath, (b) force the sucked water upwardly and (c) force the upwardly forced water through another opening in the sheath below the surface of the body of the water for causing the water forced through the another opening to (i) have speed greater than the speed of the water sucked into the sheath and (ii) cause air bubbled to be induced in the water above the another opening; one of the sheath being positioned so that the propeller thereof is adapted to turn about an axis that is inclined relative to the water surface at an angle that is substantially less than the inclination angle of propellers of others of the sheaths; the sheaths and propellers being arranged for causing the water forced by the propeller through the another opening

Application Serial No. 10/647,895

Attorney Docket: 4605-0001

of said one sheath to be propelled in the propelled direction of the sheaths and interacting with water forced through the another opening of at least one of the other sheaths located in front of the one sheath so the water propelled from the one sheath pushes forward water propelled from the at least one of the other sheaths.

19. (Previously presented) The water craft of claim 18 wherein other openings are about four to six inches below the water surface.

20. (Previously presented) The water craft of claim 15 wherein another opening is arranged to be maintained during steady state operation of the propellers about four to six inches below the water surface while the water craft is moving forward in the body of water.

21. (Previously presented) The water craft of claim 15 wherein at least one opening is arranged to be maintained during steady state operation of the propellers about 24 to 30 inches below the water surface while the water craft is moving forward in the body of water.

22. (Previously presented) The water craft of claim 15 further including a first structure carrying a plurality of the sheaths on opposite sides of and outboard of the craft.

23. (Previously presented) The water craft of claim 22 wherein the first structure includes a boom arrangement carrying the plural sheaths.

24. (Previously presented) The water craft of claim 23 wherein the boom arrangement is pivotable relative to a longitudinal axis of the water craft, the boom arrangement when pivoted causing the boom arrangement to be stowed on the craft without extending over the sides of the craft while the craft is being stowed or towed.

25. (Previously presented) The water craft of claim 22 further including a second structure carrying at least one of the sheaths forward of the forward end of the craft.

Application Serial No. 10/647,895

Attorney Docket: 4605-0001

26. (Previously presented) The water craft of claim 25 wherein the second structure is pivotable relative to the longitudinal axis of the craft.

27. (Previously presented) The water craft of claim 25 further including a third structure carrying a further one of the sheaths between the first and second structures.

28. (Previously presented) The water craft of claim 27 wherein the third structure carries the further one of the sheaths approximately along a longitudinal center axis of the craft.

29. (Previously presented) The water craft of claim 28 wherein the first and second structures carry the sheaths thereof so longitudinal axes of the sheaths thereof and drive shafts of the propellers thereof are generally vertically disposed and the third structure carries the further sheath so longitudinal axes of the sheaths thereof and drive shafts of the propellers thereof are generally horizontally disposed, the second and third structures being arranged for causing water propelled from the further sheath to be pushed forward of the craft and incident on water propelled from at least one sheath on the second structure.

30. (Previously presented) A water craft adapted to be propelled comprising a water pumping arrangement including a sheath carried by the craft, the sheath including a propeller adapted to be turned; the sheath, water craft and propeller being arranged for causing the propeller while turning to (a) suck water from the body into the sheath interior via at least one opening in the sheath, (b) force the sucked water upwardly and (c) force the upwardly forced water through another opening in the sheath below the surface of the body of the water for causing the water forced through the another opening to (i) have speed greater than the speed of the water sucked into the sheath and (ii) cause air bubbles to be induced in the water above the another opening, a first structure for carrying a plurality of the sheaths on opposite sides of and outboard of the craft; a second structure for carrying at least one of the sheaths forward of the

Application Serial No. 10/647,895

Attorney Docket: 4605-0001

forward end of the craft, a third structure for carrying a further one of the sheaths between the first and second structures; the third structure being arranged for carrying the further one of the sheaths approximately along a longitudinal center axis of the craft; the first and second structures being arranged for carrying the sheaths thereof so longitudinal axes of the sheaths thereof and drive shafts of the propellers thereof are generally vertically disposed; the third structure being arranged for carrying the further sheath so longitudinal axes of the sheaths thereof and drive shafts of the propellers thereof are generally horizontally disposed, the second and third structures being arranged for causing water propelled from the further sheath to be pushed forward of the craft and incident on water propelled from at least one sheath adapted to be on the second structure, flexible vertically extending connectors between the sheaths and the first, second and third structures; and flexible vertically extending connectors between the sheaths and the first, second and third structures.

31. (Original) The water craft of claim 15 wherein the water craft is a catamaran.
32. (Previously presented) The water craft of claim 15 further including a structure for carrying at least one of the sheaths forward of the forward end of the craft.
33. (Previously presented) The water craft of claim 32 wherein the structure is pivotable relative to the longitudinal axis of the craft.
34. (Original) The water craft of claim 15 further including a vertically extending flexible connector between the sheath and the craft.
- 35-38. (Cancelled)